

GAO

Report to the Chairman, Subcommittee
on Military Construction, Committee on
Appropriations, U.S. Senate

November 1993

ENVIRONMENTAL COMPLIANCE

Guidance Needed in Programming Defense Construction Projects



AD-A273 371



93-29539



United States
General Accounting Office
Washington, D.C. 20548

National Security and
International Affairs Division

B-254255

November 26, 1993

The Honorable Jim Sasser
Chairman, Subcommittee on Military Construction
Committee on Appropriations
United States Senate

Dear Mr. Chairman:

The Department of Defense (DOD) plans to spend billions of dollars during the next few years to ensure its facilities comply with environmental laws and regulations. The Conference Report for DOD's fiscal year 1993 military construction appropriation expressed concern that the Air Force's fiscal year 1993 budget request for environmental projects in the military construction appropriation was about twice as large as the other services combined. As you requested, we reviewed

- the future funding requirements for DOD environmental compliance and
- the differences in how the services identify, classify, and fund environmental compliance projects.

Background

The services program environmental compliance construction projects by identifying operations, equipment, and facilities that are or will be out of compliance; verifying that requirements are for environmental compliance; prioritizing requirements; and budgeting funds. DOD installations are responsible for identifying, classifying, and prioritizing projects and submitting budget requests to higher commands for verification and approval. The Secretary of Defense has directed the services to make environmental compliance and protection a priority at all levels. Timely identification of construction projects can minimize costly clean up of hazardous waste and the potential danger to public health. Maintaining compliance with environmental regulations can minimize fines and penalties that are becoming more severe.

The services fund environmental projects, including military construction, from various appropriations depending on the type and cost of a project. The military construction appropriation usually funds projects over \$300,000. The process for identifying construction needs and obtaining military construction funds through project completion is lengthy, requiring from 5 to 6 years. These projects undergo individual review and approval by DOD and the Congress. The process for programming

environmental construction using the military construction appropriation is similar to that of other construction except that special justification is required to ensure that environmental projects address a current or known future violation of environmental regulations. The process for obtaining funds for projects from other appropriations, such as operations and maintenance, is often much quicker, possibly within a year of identifying the funding need, because these projects can be approved by the services or lower level commands and installations.

Results in Brief

Future regulatory requirements are uncertain but are likely to become more stringent as new laws are passed and regulations are implemented. DOD's costs to comply with future requirements are likely to increase. While DOD estimates compliance costs will decline from about \$2.5 billion in fiscal year 1993 to about \$2 billion in fiscal year 1999, we believe costs are likely to increase because new requirements are difficult to predict and DOD has generally underestimated costs to comply.

The services' processes for identifying, classifying, and funding environmental projects vary. Regarding funding, the services finance similar environmental projects from different appropriations. For example, the Air Force funds most of its environmental projects from the military construction appropriation, while the Army uses the operations and maintenance appropriation. The Navy uses the Defense Business Operations Fund and cannot identify the appropriations source. More consistent processes would help ensure that environmental compliance costs and needs are properly identified and prioritized so that DOD and the Congress have appropriate oversight for making trade-offs in funding decisions and would help prevent funding inequities.

The services are taking actions to improve their identification of compliance needs. However, DOD needs more comprehensive guidance for determining when projects should be classified as environmental compliance, which project costs should be reported as compliance, and how the projects should be funded.

DOD's Future Environmental Requirements Are Likely to Increase

Current federal, state, and local regulatory requirements for air, water, and other elements of our environment are becoming more stringent and new requirements are expected. Laws such as the 1990 Amendments to the Clean Air Act, the Clean Water Act, the Marine Plastic Pollution Research

and Control Act of 1987, and the Oil Pollution Act of 1990 present significant future environmental requirements and costs.

For example, to meet Oklahoma's more stringent waste water standards, Tinker Air Force Base will require either upgrades to treatment plants or projects to tie into municipal treatment plants. According to a study,¹ implementation of the 1990 Amendments to the Clean Air Act will increase the number of regulated pollutants from 8 to 189 by 1995 when the implementing regulations are to be issued. Such new regulations are likely to have a significant cost impact on DOD's industrial-type bases. For example, while future cost estimates are continually changing and cannot be certain, as of May 20, 1993, the Air Force Materiel Command expected future costs of projects related to meeting requirements of the amendments to total almost \$78 million, or about 36 percent of its total military construction budget, from fiscal years 1994 through 1999. The Army is currently developing cost estimates for complying with the amendments and expects similar cost impacts on its industrial operations.

In commenting on our draft report, DOD provided more current information that showed the Air Force Materiel Command included only \$5 million in funding for the Clean Air Act amendments. A Command official told us that the Air Force had removed most of the Command's requirements for fiscal years 1995 through 1999 and had directed the Command to resubmit these requirements with better justifications in the next budget cycle. DOD stated that while costs related to the amendments are expected to grow, estimated future costs are very preliminary.

A large portion of the future costs will likely relate to unmet current environmental requirements. For example, the Navy has long had difficulty dealing with shipboard wastes and has yet to meet the requirements of the 1987 Marine Act. Under the act, the Navy must control waste disposal from its ships, including a total ban on the discharge of plastics anywhere at sea by December 31, 1993, but the Navy expects the Congress will extend the compliance deadline to December 31, 1998, and currently estimates that compliance will cost nearly \$900 million. Total compliance costs could be much higher because this estimate includes only shipboard equipment and excludes the military construction and other costs associated with onshore waste receiving and disposal facilities.

¹Weil, Gotshal, and Manges, "Clean Air Act Update," prepared for the Institute of Applied Management and Law conference (Washington, D.C.: June 12, 1991, p. 6).

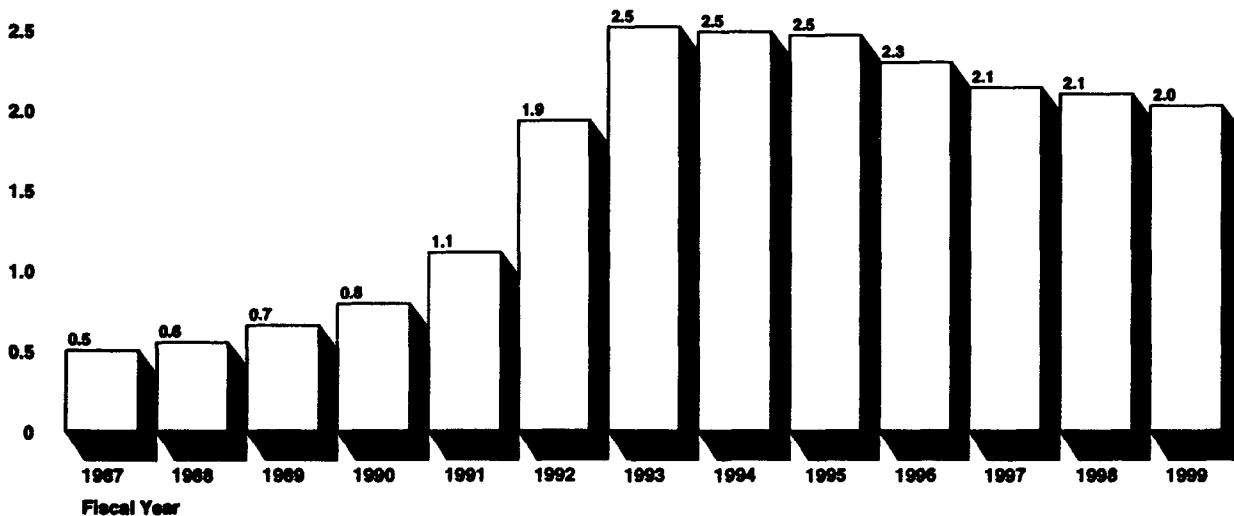
Environmental Compliance Costs Are Increasing

DOD's costs to comply with environmental requirements have increased dramatically over the past 6 years and, if growing requirements are met, will likely continue to increase. DOD's spending for environmental compliance increased (see fig. 1) from \$500 million in fiscal year 1987 to almost \$2 billion in fiscal year 1992. DOD was appropriated \$2.5 billion in fiscal year 1993 and has requested \$2.48 billion for environmental compliance projects and activities for fiscal year 1994. About \$382 million was designated for environmental compliance military construction in fiscal year 1993 and about \$275 million for fiscal year 1994. The services did not consistently track construction spending for environmental compliance before fiscal year 1993.

DOD's costs to comply with future environmental requirements may be even higher than current estimates. According to DOD's July 1993 Report on Environmental Compliance, DOD estimates the cost of environmental compliance to be \$13.5 billion, including \$1.1 billion for military construction projects for the 6-year period through fiscal year 1999 (see fig. 1).

Figure 1: Growth in DOD's Spending for Environmental Compliance

3.0 Dollars in billions



However, actual future costs are likely to be higher as future requirements are defined. While DOD expects that future reductions in force structure and its pollution prevention efforts will help to offset future compliance costs, DOD also recognizes that the costs of meeting current unmet requirements and new and more stringent requirements could exceed current estimates. For example, according to its own study, the Army estimates potential expenditures of over \$700 million, including over \$300 million for military construction, from fiscal years 1994 through 1999 to comply with the 1990 Amendments to the Clean Air Act. These estimates do not include costs to comply with stratospheric ozone and global climate protection because these costs are not yet predictable.

DOD's actual future costs could also be higher than its current estimates because its recent budget estimates for environmental compliance have been much lower than actual expenditures. For example, the Air Force budgeted \$100 million for compliance under the operations and maintenance appropriation in fiscal year 1991 but actually spent \$250 million. The Air Force also spent \$250 million for compliance in fiscal year 1992, \$60 million more than it had budgeted. According to DOD, its current estimate for total environmental compliance spending for fiscal year 1993 is over \$500 million higher than predicted in fiscal year 1992.

Services Program Environmental Compliance Construction Projects Differently

The services' processes for identifying, classifying, and funding environmental projects vary. More consistent processes would help ensure that environmental compliance needs are identified and that projects are properly classified and prioritized. Proper classification and prioritization are essential for DOD and the Congress in making trade-offs in funding decisions. The services are taking actions that should improve their identification of compliance needs. However, DOD does not have comprehensive guidance for classifying and funding environmental compliance projects. As a result, funding inequities can occur and DOD and congressional visibility of these projects is reduced.

Project Identification Varied, but Services Are Taking Actions to Improve

The services use different approaches for identifying military construction projects for environmental compliance. However, the services are developing approaches that provide greater assurance that compliance needs are identified and addressed. For example, the Air Force has established three Regional Compliance Offices to work with the Environmental Protection Agency (EPA) and state regulatory agencies to identify construction and other projects needed for environmental

compliance. In EPA Region IX,² officials told us that the Air Force, through its Western Regional Compliance Office, regularly contacts them to stay abreast of and provide input to regulatory changes and to follow up on actions taken by Air Force installations to address areas of noncompliance with regulators.

The Air Force has developed several servicewide, top-down initiatives for environmental compliance that it attributes largely to its regional compliance network. For example, Air Force headquarters directed its major commands to develop projects for their fiscal year 1993 budget submittals based on detailed guidance covering waste water treatment; hydrant fueling systems; emissions from paint facilities; environmentally deficient fire training facilities; and removal, replacement, and upgrade of underground storage tanks that do not meet environmental standards. Such projects totaled over 90 percent of the active Air Force environmental construction program.

The Office of the Secretary of Defense is developing the regional office approach under Defense Management Review Decision 920,³ which it believes will improve interservice coordination in working with regulators to develop and implement consistent environmental programs for addressing areas of noncompliance. While we believe the regional office concept has merit, we did not assess Decision 920 because DOD was still developing the proposal at the time of our review.

Effective environmental compliance assessment programs, which include systematic and documented evaluations of environmental operations and practices, can help installations identify compliance problems. According to a DOD Inspector General's report,⁴ the services have not implemented these programs consistently or effectively. As a result, the services lack assurance that they have identified the true scope of their environmental compliance problems. However, the report showed that the Air Force's Environmental Compliance Assessment and Management Program included more complete guidance for assessments than the other services' programs. The services agreed to take actions recommended by the Inspector General to improve their assessment programs.

²EPA's Region IX covers Arizona, California, Hawaii, Nevada, American Samoa, Guam, and the Trust Territories of the Pacific.

³Defense Management Review Decisions are initiatives taken in response to the 1986 Packard Commission's recommendations to improve the management and organization of DOD.

⁴Environmental Compliance Assessment Programs, Report Number 92-011, Nov. 8, 1991. DOD Office of the Inspector General.

Services' Variations in Project Classification Could Lead to Funding Inequities

The services have inconsistently classified projects as either environmental or mission-related. Because environmental projects receive high priority and are generally funded, projects improperly classified as environmental could be approved when they would not have been approved if classified to meet a routine mission need. Conversely, when high-priority environmental projects are requested under lower priority mission funding, they may not be funded.

Service differences in classifying hazardous waste and hazardous material projects illustrate inconsistencies in project classification. While DOD guidance includes construction of storage facilities for both hazardous material and hazardous waste as environmental when they are required by environmental law, Air Force and Army guidance does not treat hazardous material storage facilities as environmental. The Air Force believes that DOD improperly includes hazardous material projects as environmental because these projects are not subject to environmental laws. The Army excludes hazardous material storage projects as environmental because these projects are typically managed by the Army's logistics management system rather than by Army engineers who manage most environmental functions. The Army was not aware that its policy conflicted with DOD guidance and told us it would reexamine the policy. The Navy, which has no specific guidance addressing how to classify these specific projects, has been classifying both hazardous material and hazardous waste projects as environmental compliance.

Inconsistencies such as these can occur, in part, because DOD has not issued comprehensive guidance on how and when to classify a project as an environmental compliance requirement and, as a result, service guidance varies and is incomplete or unclear. DOD's guidance states that all activities required by environmental law should be reported as environmental. The guidance provides a limited number of examples and does not address key issues such as how projects having both mission-related and environmental components should be classified.

The Army and the Navy identify projects that are to meet environmental compliance requirements or have significant compliance portions. However, they do not define what is significant or report the portion of costs related to compliance. The Air Force identifies environmental compliance projects as those with related costs that are at least 50 percent of total project costs. All costs of projects meeting this criterion are budgeted as environmental compliance. For example, the Air Force classified a fiscal year 1995 \$8.4 million project to upgrade an industrial

corrosion control facility, which houses the operations for paint stripping and painting aircraft, at the Oklahoma City Air Logistics Center as environmental compliance because a portion of the project would bring the facility into compliance with air pollution standards. Project files stated that 50 percent of project costs were environmental, but the files contained no detailed supporting documentation. The Air Force included the total cost of this project in its military construction budget request for environmental compliance.

In commenting on our report, DOD stated that project files document to what extent projects are driven by environmental law. DOD stated that its guidance for classifying these facilities clearly states that only those facilities driven by environmental law should be classified as environmental and, therefore, not all such facility construction is environmental.

Service Differences in Funding Limit DOD and Congressional Visibility of Construction Projects

The amount of environmental spending from individual appropriations varies widely among the services. Unlike the military construction appropriation, many appropriations do not provide detailed project information; therefore, DOD and the Congress have limited visibility over much of the services' environmental spending. Furthermore, funding variations impede DOD's ability to measure environmental investment costs and progress in addressing environmental concerns.

The services' total budget requests for environmental compliance projects were similar, but the amounts the services requested for these projects from individual appropriations varied widely. Table 1 shows the services' total budgets (excluding the guard and reserve) for environmental compliance.

Table 1: The Services' Total Fiscal Year 1993 Environmental Compliance Budgets

| Dollars in millions | |
|---------------------|---------|
| Service | Budget |
| Air Force | \$602.4 |
| Army | 631.7 |
| Navy/Marines | 738.7 |

The Air Force funds more of its environmental compliance projects through the military construction appropriation than the other services.

The Air Force's fiscal year 1993 environmental compliance budget for military construction was nearly twice the other services combined (see table 2). The Air Force gave particular emphasis to environmental military construction after the Office of the Secretary of Defense reduced the services' fiscal year 1993 budget submittals while giving priority to certain projects, including environmental. Although all the services increased their environmental military construction after the Secretary's revised guidance, the Air Force's budget request for these projects increased from \$11.6 million to a final budget of \$245.1 million, including \$13.1 million for three projects that it reclassified as environmental (see fig. 2). The Army reported most of its spending for environmental compliance in the operations and maintenance account, while the Navy reported most of its environmental compliance funding coming from the Defense Business Operations Fund (see fig. 3).⁵ The Navy could not identify the source of appropriated funding for environmental spending used to reimburse the Fund in fiscal year 1993.

Table 2: The Services' Total Fiscal Year 1993 Budgets for Environmental Compliance Military Construction

| Dollars in millions | |
|---------------------|---------|
| Service | Budget |
| Air Force | \$245.1 |
| Army | 59.1 |
| Navy/Marines | 78.2 |

⁵In October 1991, DOD established the Fund, which consolidates existing industrial and stock funds. The Fund is not an annually appropriated account, but is a revolving fund reimbursed by military customers for various goods and services received from military suppliers.

Figure 2: The Services' Budgets for Environmental Military Construction Before and After the Secretary's Revised Guidance

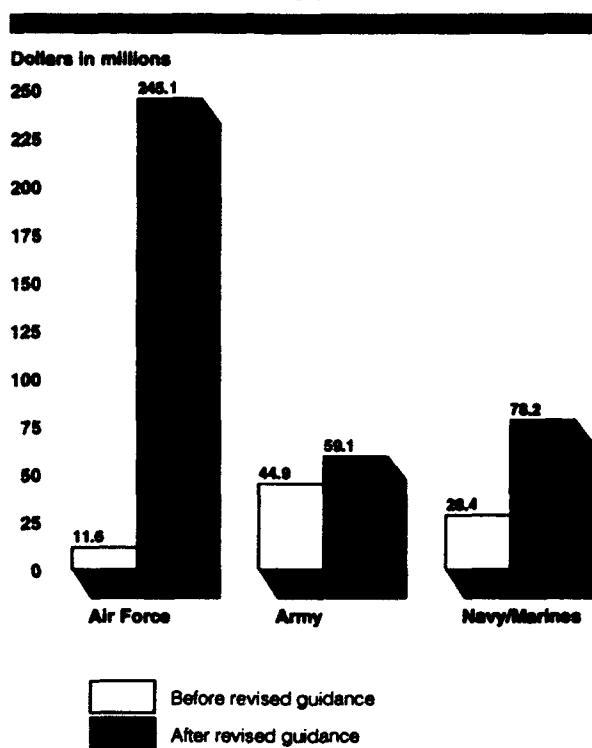
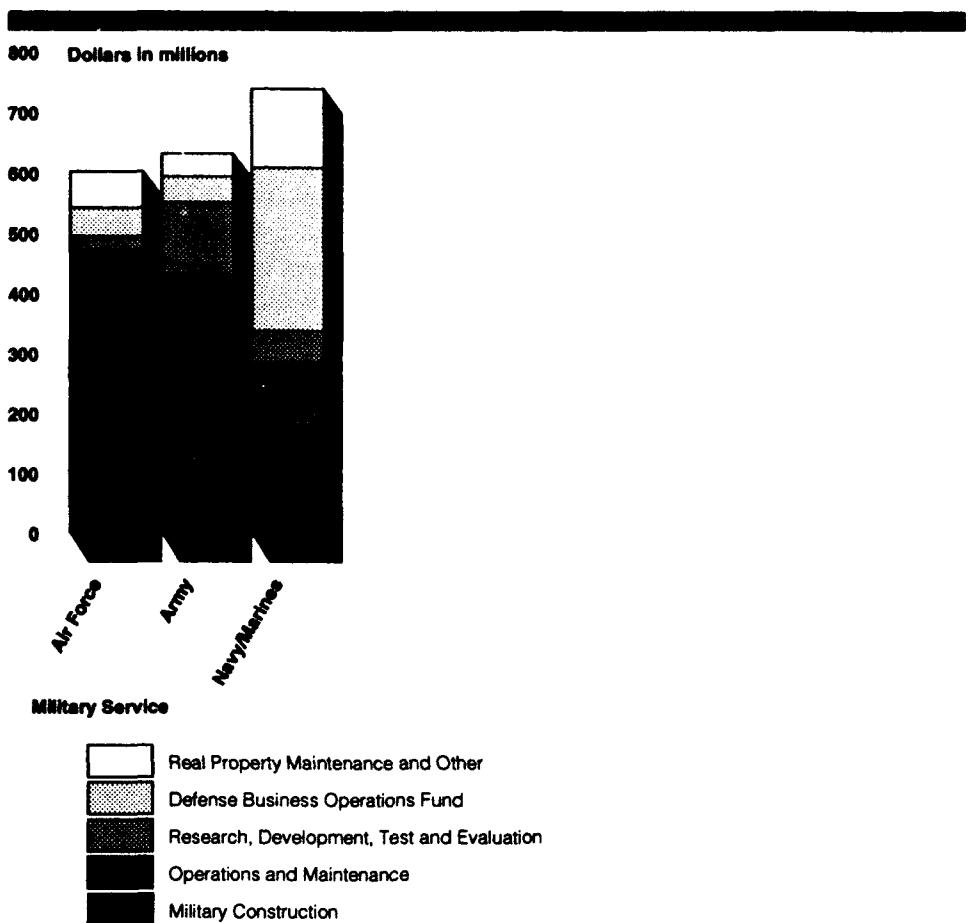


Figure 3: The Services' Total Environmental Compliance Budgets by Appropriation, Fiscal Year 1993



The military services fund similar environmental compliance construction projects from different appropriations, in part, because DOD has not provided the services comprehensive guidance on the appropriate funding source for different types of environmental projects. As a result, some installations have avoided using the military construction appropriation to meet environmental compliance schedules mandated by the regulatory agencies due to the long lead times involved.

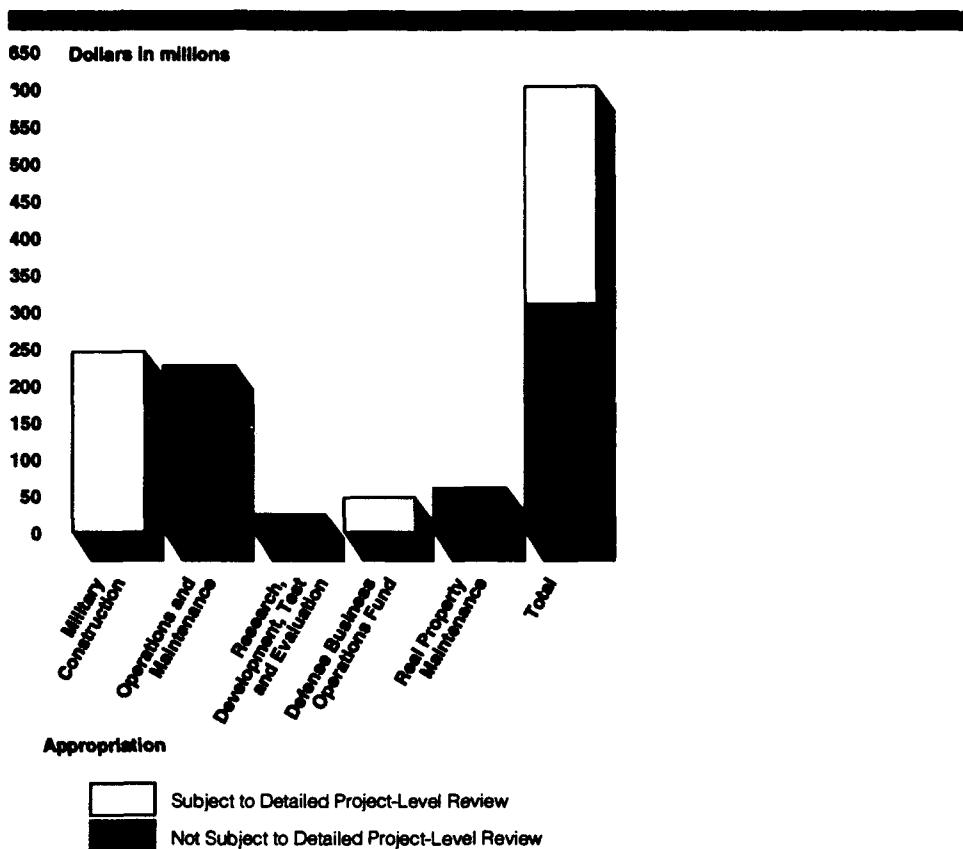
Funding of underground storage tanks illustrates service differences in funding environmental projects. While the other services have requested operations and maintenance or other funds for underground storage tank projects, the Air Force has combined multiple underground storage tank

projects under single, installationwide construction projects. According to Air Force officials, this strategy will result in a more efficient program and help the installations conserve their declining operations and maintenance budgets. The Air Force's military construction budget request to the Congress for fiscal year 1993 included \$75.27 million for underground storage tanks. In contrast, the other services combined requested about \$130 million for underground storage tank projects through other appropriations but none through military construction.

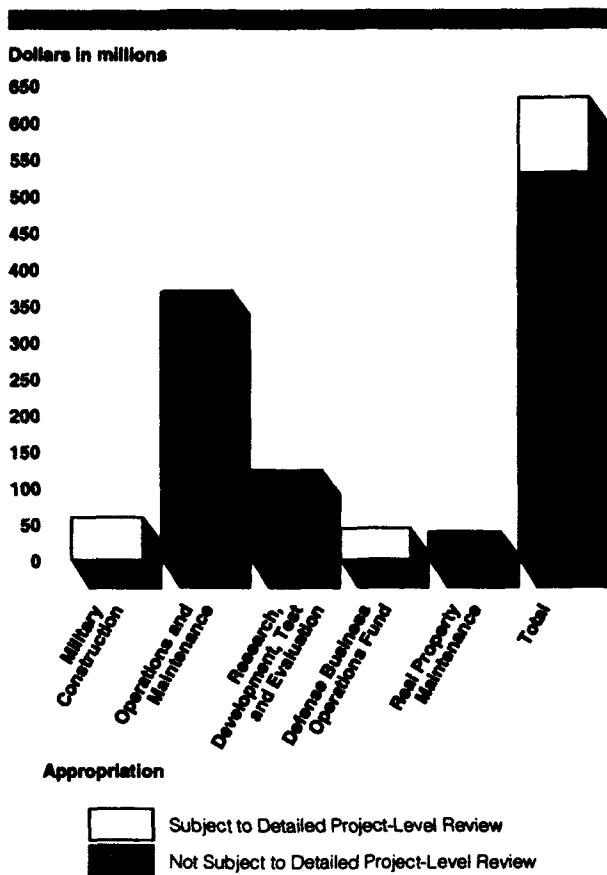
In another example of funding differences, the Army Materiel Command has historically used funds from the unspecified minor military construction account for time critical projects, such as for environmental compliance, costing from \$300,000 to \$1.5 million. These projects can also be funded as major construction under the military construction appropriation, but when funded as unspecified minor projects they can receive funding during the same year projects are identified because they do not require specific legislative action. Officials told us that in recent years the Command has not received enough of these funds to meet requirements. As a result, projects, such as a \$750,000 environmental project for a coal runoff detention pond at the Tobyhanna Army Depot, have been delayed for up to 3 years awaiting funding. Overall, while the Air Force requested \$36.3 million in major construction funding for 40 specific projects costing \$1.5 million or less (15.4 percent of its total fiscal year 1993 military construction appropriation request for environmental compliance), the Army and the Navy combined requested only \$4.4 million for four of these projects (3 percent of their total requests).

The appropriations process generally provides limited visibility of projects, including environmental construction and nonconstruction projects, to DOD and the Congress during the budgeting process. Usually, only the military construction budget process includes detailed project descriptions and justifications for congressional review. In addition, DOD and the Congress have less control over projects in the operations and maintenance appropriation because while the services review these projects during the budgeting process, installations have greater latitude in funding individual operations and maintenance projects included in the budget or reprogramming these funds to meet other needs. Because the Air Force funds more of its environmental requirements from military construction than the other services, a larger percentage of the Air Force's environmental compliance spending is subject to greater scrutiny than the budgets of the other services (see figs. 4, 5, 6, and 7).

**Figure 4: Air Force's Fiscal Year 1993
Budget for Environmental Compliance
Subject to Project-Level Review**



**Figure 5: Army's Fiscal Year 1993
Budget for Environmental Compliance
Subject to Project-Level Review**



**Figure 6: Navy's Fiscal Year 1993
Budget for Environmental Compliance
Subject to Project-Level Review**

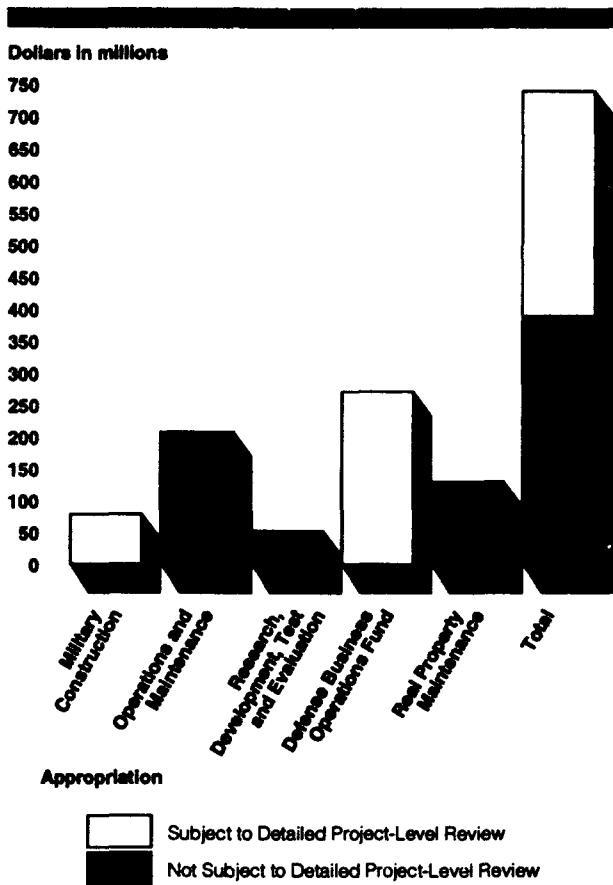
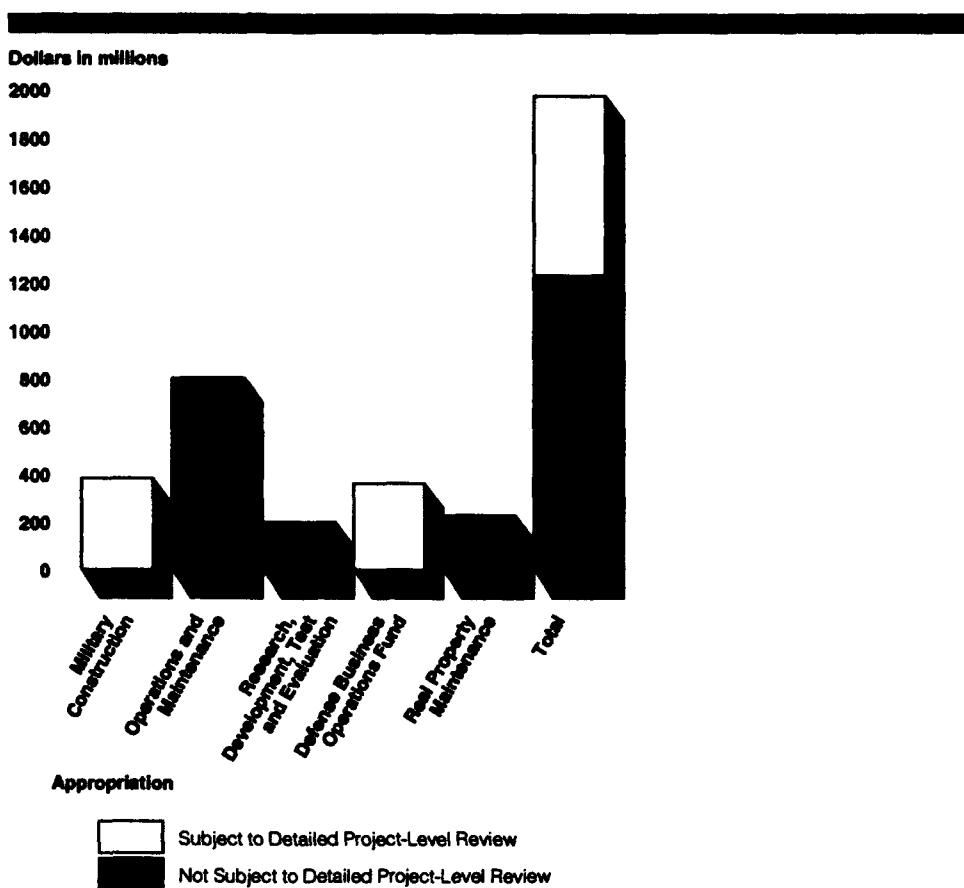


Figure 7: The Services' Total Fiscal Year 1993 Budgets for Environmental Compliance Subject to Project-Level Review



DOD has created an Environmental Budgeting Task Force to develop consistent methods for planning, programming, and budgeting environmental funds. In establishing this task force, DOD cited the multitude of service accounts available for environmental funding and the difficulty this presents in measuring progress in addressing environmental concerns.

Measuring progress and program results in addressing environmental problems is essential for making funding trade-offs during the current austere budget environment. Even though DOD's environmental budget has grown dramatically over the past few years, requirements continue to exceed available funds. For example, although DOD is generally able to fund projects to correct existing or known future areas of noncompliance,

it has few funds available to fund innovative programs, such as pollution prevention.

Measuring progress requires consistent reporting of investment costs and results. According to the task force chairman, DOD cannot determine investment costs because the services do not consistently budget and report these costs. For example, the chairman told us that some military installations include only investment costs in the research, development, test, and evaluation appropriation, while other installations include investment costs and normal installation operating costs. In addition, some appropriations, such as operations and maintenance, either exclude or do not separately report investment costs while the military construction appropriation is intended to include only investment costs. Consequently, when the services fund similar projects, such as the underground storage tanks we discussed earlier, using both operations and maintenance and military construction appropriations, investment costs are not consistently reported.

Recommendation

We recommend that the Secretary of Defense develop guidance to assist the services in consistently classifying projects as environmental or to meet a mission or other requirement. This guidance should specify how the services will report costs related to meeting environmental requirements for projects classified as other than environmental and from which appropriations the projects should be funded.

Agency Comments and Our Evaluation

In commenting on this report, DOD generally agreed with our findings and recommendation. However, DOD did not agree that its guidance for classifying storage facility projects for hazardous waste and hazardous materials was unclear or that project files did not provide adequate documentation of project costs related to environmental compliance.

We agree that DOD's guidance states that only those facilities driven by environmental law should be classified as environmental and, therefore, not all such facility construction should be classified as environmental. However, our concern is that DOD's guidance is not comprehensive and does not address key issues. As we stated earlier, the Air Force and the Army do not consider any construction of hazardous material storage facilities to be environmental, while the Navy generally classifies these projects as environmental compliance.

Also, the \$8.4 million Air Force corrosion control project at the Oklahoma City Air Logistics Center illustrates that project files do not always provide adequate documentation of project costs related to environmental compliance. DOD's comments are addressed in the body of this report where appropriate and are reprinted in their entirety in appendix II.

Scope and Methodology

To obtain information on DOD's and the military services' environmental requirements and costs, we reviewed DOD budget reports and budget submissions for fiscal years 1993 and 1994. This information provided both known and anticipated future costs. Known costs for fiscal year 1993 are from actual appropriations. We obtained the services' anticipated future costs through fiscal year 1999 from their fiscal year 1994 budget requests and DOD's July 1993 Report on Environmental Compliance. We documented examples of future requirements that have not been totally defined by reviewing and discussing various service cost studies with DOD officials to show that known costs will likely increase.

To determine differences in the services' processes for programming environmental compliance projects, we discussed these processes with officials in EPA's Region IX and officials at DOD, Air Force, Army, Navy, and Marine Corps headquarters in the Washington, D.C., area and the Air Force's Western Region Compliance Office. We also visited seven major commands and 11 installations (see app. I) to further discuss these processes and to document examples of differences by reviewing project files and budget data. These installations and major commands had some of the largest fiscal year 1993 budgets for military construction related to environmental compliance.

We conducted our review between November 1992 and July 1993 in accordance with generally accepted government auditing standards.

We are providing copies of this report to interested committees and Members of Congress; the Secretaries of Defense, the Army, the Navy, and the Air Force; and the Director of the Office of Management and Budget. We will also make copies available to other parties upon request.

Please contact me at (202) 512-8412 if you or your staff have any questions concerning this report. Major contributors to this report are listed in appendix III.

Sincerely yours,



Donna M. Heivilin, Director
Defense and NASA Management Issues

Major Commands and Installations Visited

Air Force

Pacific Air Force Command, Hawaii
Air Mobility Command, Illinois
Air Force Materiel Command, Ohio
Vandenberg Air Force Base, California
Edwards Air Force Base, California
Scott Air Force Base, Illinois
Wright-Patterson Air Force Base, Ohio
Oklahoma City Air Logistics Center, Oklahoma
Tinker Air Force Base, Oklahoma

Army

Army Materiel Command, Virginia
Armament, Munitions and Chemical Command, Illinois
U.S. Army Pacific Command, Hawaii
Schofield Barracks, Hawaii
Pine Bluff Army Arsenal, Arkansas

Navy/Marine Corps

Naval Facilities Engineering Command, Virginia
Camp Pendleton Marine Corps Base, California
Pacific, Engineering Field Division, Hawaii
Pearl Harbor Naval Complex, Hawaii

Comments From the Department of Defense



THE DEPUTY UNDER SECRETARY OF DEFENSE

WASHINGTON, DC 20301-3000

ACQUISITION

26 OCT 1993

Mr. Frank C. Conahan
Assistant Comptroller General
National Security and
International Affairs Division
U.S. General Accounting Office
Washington, D.C. 20548

Dear Mr. Conahan:

This is the Department of Defense (DoD) response to the General Accounting Office (GAO) draft report, "ENVIRONMENTAL COMPLIANCE: Guidance Needed in Programming Defense Construction Projects," dated August 23, 1993 (GAO Code 392747), OSD Case 9470. The Department generally concurs with the draft report.

The DoD agrees that environmental budgeting and accounting should be standardized to the extent possible. Accordingly, in July 1993, the Office of the Secretary of Defense directed that the Components identify funding required for cleanup, compliance, conservation, pollution prevention, and technology. In addition, budget exhibits have been revised to reflect that standardized structure beginning with the FY 1995 budget. It should be recognized, however, that considerable guidance already exists, and many environmental requirements are not appropriate for inclusion in the military construction appropriation.

The Department is committed to full and sustained compliance with all environmental legal requirements. The DoD is committed to strengthening the management of environmental programs and is doing so through an Environmental Security Review, which was part of the Secretary of Defense Bottom-Up Review of DoD programs.

The DoD provides an annual report to the Congress on environmental compliance funding and personnel requirements by Military Component. The latest report, dated July 6, 1993, presented estimated requirements for fiscal years 1994-1999. The report indicated that the Department is developing a new environmental security strategy focused on cleanup, compliance, conservation, and pollution prevention, plus technology.

The Report on Environmental Compliance also documented DoD implementation of the recommendations in the 1991 DoD Inspector General report on Environmental Compliance Assessment Programs.

The Military Components have established extensive compliance assessment programs, and the Office of the Secretary

Environmental Security - Defending Our Future

Appendix II
Comments From the Department of Defense

of Defense has been taking action to encourage and oversee their programs. Those actions include:

- Semiannual program reviews.
- Establishment of the Office of the Assistant Deputy Under Secretary of Defense (Compliance), responsible for developing compliance policy and overseeing program execution.
- Development of a Defense Environmental Corporate Information Management structure to help analyze and manage DoD's environmental programs.
- Establishment of a Defense Environmental Security Council, comprised of policy level personnel to address compliance and financial issues.
- Revision of the environmental program and budget guidance for preparation of the FY 1995 budget.

The Department generally concurs with the GAO findings concerning likely increases in future environmental requirements/costs and differences among the Components in classifying projects. However, considerable guidance already exists in classifying projects as environmental and in programming environmental requirements. The Components analyze projects carefully and put them in appropriate programs based on the overriding guidance of the programs themselves. The budget process provides appropriate levels of visibility based on the type and size of projects and of recurring costs. Projects that do not produce a complete and usable facility or a complete and usable improvement to an existing facility and recurring maintenance projects are not appropriate for the military construction appropriation.

The detailed DoD comments on the report findings and recommendation are enclosed. The DoD appreciates the opportunity to comment on the draft report.

Very truly yours,



Gary D. Vest
Principal Assistant Deputy Under Secretary
of Defense (Environmental Security)

Enclosure

GAO DRAFT REPORT - DATED AUGUST 23, 1993
(GAO CODE 392747) OSD CASE 9470

"ENVIRONMENTAL COMPLIANCE: GUIDANCE NEEDED IN
PROGRAMMING DEFENSE CONSTRUCTION PROJECTS"

DEPARTMENT OF DEFENSE COMMENTS

* * * * *

FINDINGS

FINDING A: The DoD Programming and Funding of Environmental Compliance Projects. The GAO reported that the DoD plans to spend billions of dollars during the next few years to ensure DoD facilities comply with environmental laws and regulations. The GAO observed that, to program environmental compliance construction projects, the Military Services are (1) identifying operations, equipment, and facilities that are or will be out of compliance, (2) verifying that requirements are for environmental compliance, (3) prioritizing requirements, and (4) budgeting the funds. The GAO pointed out that the Secretary of Defense directed the Services to make environmental compliance and protection a priority at all levels.

The GAO found that the Services fund environmental projects, including military construction, from various appropriations--depending on the type and cost of a project. The GAO explained that the military construction appropriation funds projects over \$300,000. The GAO reported that the process for identifying construction needs and obtaining funds through project completion is lengthy, requiring from 5 to 6 years--and requires individual review and approval by the DoD and the Congress. The GAO also reported that the process for programming environmental construction using the military construction appropriation is similar to that for other construction, except that special justification is required to ensure the projects address a current or known future violation of environmental regulations. The GAO noted that the process for obtaining funds for projects from other appropriations, such as operations and maintenance, is often much quicker--possibly within a year of identifying the funding need--because the projects can be approved by the Services or lower commands and installations. (pp. 1-2/GAO Draft Report)

DOD RESPONSE: Concur. On October 10, 1989, the Secretary of Defense directed that the first priority of the DoD

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Enclosure

environmental policy must be to integrate and budget environmental considerations into DoD activities and operations, in addition to making environmental compliance and protection a priority at all levels. Since environmental considerations are so pervasive, they are a part of most DoD activities and operations, to a greater or lesser degree. The DoD goal is to instill an environmental ethic in all DoD personnel and to achieve full and sustained compliance with all legal requirements.

The DoD provides an annual report to the Congress on environmental compliance funding and personnel requirements by Military Component. The latest report, dated July 6, 1993, presents estimated requirements over fiscal years 1994-1999. Compliance requirements related to cleanup, base realignment and closure, and chemical demilitarization are reported and funded separately.

Environmental requirements are identified and reported in accordance with numerous laws, executive orders, regulations, policies, and guidance, including Executive Order 12088, "Federal Compliance with Pollution Control Standards," and Office of Management and Budget Circular A-106, "Reporting Requirements in Connection with the Prevention, Control and Abatement of Environmental Pollution at Existing Federal Facilities." The projects are programmed in accordance with Title 10 U.S. Code, DoD guidance on submission of program and budget information, and applicable guidance of each Military Component. The DoD works to execute military construction, operation and maintenance, and other programs under applicable sections of Title 10, and direction contained in annual congressional authorization, appropriation, and report language.

The military construction appropriation is for projects regardless of cost, not just those over \$300,000. Operation and maintenance is only for projects less than \$300,000. Typically, military construction funds projects over \$300,000, while operation and maintenance funds those under \$300,000. A military construction project is a one-time effort intended to produce a complete and usable facility or improvement to an existing facility. Operation and maintenance typically funds recurring requirements, such as salaries, supplies, and services.

The GAO finding that the process for obtaining funds from military construction appropriations is usually longer (5 to 6 years) than for appropriations such as operation and maintenance implies that the long time period is a characteristic of the military construction appropriation process. While the DoD concurs the operation and maintenance appropriations usually allow greater flexibility and,

Appendix II
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therefore, may be faster, it should be pointed out that the length of time it often takes to obtain funding approval and complete a project may also be attributed to the nature of the project rather than the appropriation in which it is funded.

FINDING B: Future DoD Environmental Requirements Are Likely To Increase. The GAO reported that Federal, state, and local regulatory requirements for the environment are becoming more stringent and new requirements are expected. The GAO observed that laws, such as the 1990 Amendments to the Clean Air Act, the Clean Water Act, the Marine Plastic Pollution Research and Control Act of 1987, and the Oil Pollution Act of 1990, present significant future environmental requirements and costs.

The GAO cited an example where Tinker Air Force Base will require either upgrades to treatment plants or projects to tie into municipal treatment plants in order to meet more stringent waste water standards established in Oklahoma. The GAO also reported that, according to a study, implementation of the 1990 Amendments to the Clean Air Act will increase the number of regulated pollutants when the implementing regulations are issued. The GAO concluded that such new regulations are likely to have a significant cost impact on DoD industrial-type bases. As an example, the GAO reported the Air Force Materiel Command expected future costs of projects related to meeting requirements of the Amendments to total almost \$78 million--or about 36 percent of its total military construction budget for the period FY 1994 through FY 1999.

The GAO also concluded that a large portion of future costs will likely relate to unmet current environmental requirements. The GAO cited, as an example, the long difficulty the Navy has had in dealing with shipboard wastes and meeting the requirements of the 1987 Marine Act. The GAO learned that the Navy plans to request an extension of the compliance deadline on the discharge of plastics and estimates that compliance with the requirement will cost nearly \$900 million. The GAO concluded that total compliance costs could be much higher because the estimate includes only shipboard equipment and excludes costs associated with on shore facilities. (pp. 3-4/GAO Draft Report)

DoD RESPONSE: Partially concur. The DoD agrees that future DoD environmental requirements are likely to increase, due to new and amended laws and regulations at the Federal, state, and local levels. However, the Air Force Materiel Command costs cited by the GAO to comply with the 1990 amendments to the Clean Air Act are incorrect. The current Air Force

Materiel Command FY 1994-1999 environmental military construction program totals \$94 million, of which only \$5 million is for Clean Air Act projects (five percent of the environmental military construction budget). While Clean Air Act costs are expected to grow, future costs are difficult to estimate until the Environmental Protection Agency promulgates implementing regulations, including emission limits for approximately 189 toxic air pollutants.

FINDING C: Environmental Compliance Costs Are Increasing.
The GAO found that the DoD costs to comply with environmental requirements have increased dramatically over the past six years--rising from \$500 million in FY 1987 to almost \$2 billion in FY 1992. The GAO noted that the DoD was appropriated \$2.51 billion in FY 1993 and requested \$2.48 billion for environmental compliance projects for FY 1994. The GAO found that about \$382 million was designated for environmental compliance military construction in FY 1993 --and about \$275 million for FY 1994. The GAO noted that the Services did not consistently track construction spending for environmental compliance before FY 1993.

The GAO concluded that the DoD costs to comply with future environmental requirements may be even higher than current estimates. The GAO explained that the July 1993 DoD Report on Environmental Compliance estimates the cost of environmental compliance to be \$13.5 billion, including \$1.1 billion for military construction projects for the six-year period through FY 1999. The GAO concluded, however, that actual future costs are likely to be higher as future requirements are defined. As an example, the GAO pointed out that, for the period FY 1994 through FY 1999, the Army estimates it will spend over \$700 million, including over \$300 million for military construction, to comply with the 1990 Amendments to the Clean Air Act.

The GAO concluded that the actual future costs could also be higher than current estimates because recent DoD budget estimates for environmental compliance have been much lower than actual expenditures. The GAO reported, for example, that the Air Force budgeted \$100 million for compliance under the operations and maintenance appropriation in FY 1991, but actually spent \$250 million. The GAO reported that the Air Force also spent \$250 million for compliance in FY 1992, which was \$60 million more than budgeted. The GAO also noted that, according to the DoD, the current estimate for total environmental compliance spending for FY 1993 is over \$500 million higher than was predicted in FY 1992. (pp. 2-3, pp. 4-6/GAO Draft Report)

DOD RESPONSE: Partially concur. The Army has programmed

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about \$68 million for environmental military construction of all kinds for the FY 1994-1999 period, not \$300 million to comply with the Clean Air Act Amendments alone.

As indicated in the July 1993 DoD Report on Environmental Compliance submitted to the Congress, estimated requirements represent program needs under existing conditions and take into account all known and validated requirements under existing applicable environmental laws and foreseeable regulations. It is possible that additional funding requirements will be identified in future years, particularly with the introduction of new statutory and regulatory mandates. There may also be savings from currently projected costs due to management improvements, technology advances, and reductions to the base structure. It should be remembered that environmental compliance is complex and costly, and requirements change for various reasons, including (1) the large number, size, and complexity of DoD facilities and operations; (2) increasingly stringent laws, regulations, and standards; and (3) the large number of regulators at the national, state, and local levels, and differences among host nations overseas.

The Components have developed the following comprehensive programs to better identify and address present and future compliance requirements:

- Army Environmental Compliance System.
- Navy/Marine Corps Environmental Compliance Evaluation Program.
- Air Force Environmental Compliance and Assessment Management Program.
- Defense Logistics Agency Program of environmental audits and reviews.

FINDING D: The Services Program Environmental Compliance Construction Projects Differently. The GAO found that the Military Services use different approaches to identify military construction projects for environmental compliance. The GAO also found, however, that the Services are developing approaches that provide greater assurance that compliance needs are identified and addressed. As one example, the GAO reported the Air Force established three Regional Compliance Offices to work with the Environmental Protection Agency and state regulatory agencies to identify construction and other projects needed for environmental compliance. The GAO also cited the Air Force development of several Service-wide, top down initiatives for environmental compliance that are attributable to the regional compliance network. In addition,

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the GAO reported that the Office of the Secretary of Defense is developing the regional office approach under Defense Management Review Decision 920, intended to improve inter-service coordination to develop and implement consistent environmental programs for addressing areas of noncompliance.

The GAO observed that effective environmental compliance assessment programs, including systematic and documented evaluations of environmental operations and practices, can help installations identify compliance problems. The GAO cited a 1991 DoD Inspector General report that found the Military Services had not implemented the programs consistently or effectively--resulting in a lack of assurance the true scope of environmental compliance problems have been identified. (p. 3, pp. 6-8/GAO Draft Report)

Now on pp. 2 and 5-6.

DoD RESPONSE: Concur. Subsequent to Defense Management Report Decision 920, during the third quarter of FY 1993, the Office of the Secretary of Defense performed an Environmental Security Review which identified numerous initiatives for improving compliance. The DoD is developing a new environmental security strategy focused on cleanup, compliance, conservation, pollution prevention, and technology. The strategy includes the following objectives:

- Improving the ability of the DoD to identify, program, and budget for requirements, and evaluate program execution.
- Improving environmental education and training.
- Increasing partnering with legislators, regulators, and the public.
- Emphasizing pollution protection through source reduction and more efficient material and energy use.

The strategy will be implemented by the Office of the Deputy Under Secretary of Defense (Environmental Security) through a policy-level Defense Environmental Security Council and its committee/board structure, beginning in FY 1994.

Appendix C to the July 1993 DoD Report on Environmental Compliance to the Congress documents the DoD implementation of the recommendations in the 1991 DoD Inspector General report on Environmental Compliance Assessment Programs. The Military Departments and the Defense Logistics Agency have established extensive environmental compliance assessment programs. The Office of Deputy Under Secretary of Defense (Environmental Security) has also taken and plans several actions to encourage, monitor, and measure the effectiveness of those

programs, including the following:

- Biannual management reviews of the Component's Environmental Compliance and Assessment Programs have been conducted since December 1991.
- The Office of the Assistant Deputy Under Secretary of Defense (Compliance) was established in May 1993 to develop compliance policy and oversee compliance programs.
- Development of a Defense Environmental Corporate Information Management structure began in January 1993 to help analyze and manage DoD's environmental programs.
- An annual report on environmental compliance, provided to the Congress in accordance with Title 10 U.S. Code 2706(b), identifies projected funding levels and personnel for the budget year and the next five fiscal years.
- Establishment of a Defense Environmental Security Council, comprised of policy level personnel to address compliance and financial issues, is planned for FY 1994.

FINDING E: Service Variations in Project Classification Could Lead to Funding Inequities. The GAO concluded that the Services have inconsistently classified projects as either environmental or mission-related. The GAO found that, while DoD guidance includes construction of storage facilities for both hazardous material and waste as environmental, Army and Air Force guidance excludes hazardous materials storage facilities as environmental. The GAO found that the Navy has no specific guidance on how to classify the projects, but is classifying both hazardous material and waste projects as environmental compliance. The GAO further concluded that such inconsistencies can occur, in part, because the DoD has not issued comprehensive guidance on how and when to classify a project as an environmental compliance requirement. In summary, the GAO concluded that, while the DoD guidance states all activities required by environmental law should be reported as environmental, only a limited number of examples are provided and the guidance does not address key issues such as how projects having both mission related and environmental components should be classified.

The GAO found the Army and the Navy identify projects that are to meet environmental compliance requirements or have significant compliance portions. The GAO also found, however, that

neither the Army or Navy defines what is "significant"--nor do they report and budget separately for the portion of costs related to compliance. The GAO found that the Air Force identifies environmental compliance projects as those with related costs that are at least 50 percent of total project costs, while the Air Force budgets all such costs as environmental compliance.

The GAO concluded that, because environmental projects receive high priority and are generally funded, projects improperly classified as environmental could be approved when they would not have been--if they had been classified to meet a routine mission need. The GAO also concluded that, conversely, when high priority environmental projects are requested under lower priority mission funding, they may not be funded. (p. 3, pp. 8-10/GAO Draft Report)

Now on pp. 2 and 7-8.

DOD RESPONSE: Partially concur. The DoD guidance, contained in the 1988 publication by the Office of the Secretary of Defense, "Federal Agency Pollution Abatement Plan (OMB A-106), A Handbook for Understanding the OMB A-106 Process," includes construction of hazardous materials/waste storage areas as examples of A-106 projects. It also states that "All activities which are required by environmental law should be recorded through the OMB A-106 process and appropriate funding requests should be submitted in the normal budget process." Thus, not all such storage area construction is environmental, but only that driven by environmental law, and funding should follow the normal budget process.

In the military construction appropriation, projects are categorized as operations, training, maintenance and production, utilities, air or water or noise pollution abatement, planning and design, etc. A project is defined by the predominant category. If a project is required for a non-environmental category, such as maintenance facilities, it falls under the maintenance category in the budget process. Although the project could include the latest environmental technology for paint removal, plating, parts cleaning, etc., it is listed as one category, with possible impacts on other categories. Part of the project would not be funded under the military construction maintenance category, and other parts under water or air pollution abatement. Project documentation indicates to what extent projects are driven by environmental law.

If a wastewater treatment plant is old and worn out, it would be replaced as a utility project. If the plant were replaced because it no longer met treatment standards due to new legislation, it would be a water pollution abatement project. Splitting a military construction project into an operational cost and an environmental cost in the budget request could

endanger funding for a complete and usable facility, which is also a legally mandated requirement. It is illegal to increment projects.

Several initiatives of the Office of the Deputy Under Secretary of Defense (Environmental Security) resulting from the Environmental Security Review should help to increase program oversight and to standardize environmental budgeting and accounting. The DoD agrees that projects should not be identified as environmental, unless they are driven by environmental laws or environmental programs, such as pollution prevention or conservation of natural and cultural resources. While inappropriate classification of environmental projects is possible, it has not been a problem. The Components analyze projects carefully and put them in appropriate programs based on the overriding guidance of the programs themselves. The DoD intent and approach is to comply with legal requirements and meet mission requirements within program and budget guidance and constraints. (Also see the DoD response to Finding D).

See pp. 30-31.

FINDING F: Service Differences in Funding Construction Projects. The GAO found that the total budget requests for environmental compliance projects by the Military Services were similar, but the amounts the Services requested from individual appropriations varied widely. The GAO found that the Air Force funds more of its environmental compliance projects through the military construction appropriation than do the other Services. The GAO explained that the Air Force gave particular emphasis to environmental military construction after the Office of the Secretary of Defense reduced the FY 1993 budget submittals of the Services, while giving priority to certain projects, including environmental. The GAO found that after the revised DoD guidance was issued, all the Services increased their environmental military construction. The GAO further found, however, that the Army reported most of its spending for environmental compliance in the operations and maintenance account, while the Navy reported most such spending coming from the Defense Business Operations Fund.

The GAO concluded that the Services fund similar environmental compliance construction projects from different appropriations, in part, because the DoD has not provided the Services comprehensive guidance on the appropriate funding source for different types of environmental projects. The GAO found, that as a result, some installations have avoided using the military construction appropriation to meet environmental compliance schedules because of the long lead times involved. The GAO reported that the funding of underground storage tanks illustrates the Service differences in funding environmental

projects. The GAO explained that, while the other Services have requested operations and maintenance or other funds for the tanks, the Air Force combined multiple underground tank projects under single, installation-wide construction projects. The GAO noted that, according to Air Force officials, such a strategy will result in a more efficient program and help the installations conserve declining operations and maintenance budgets.

As another example of funding differences, the GAO reported the Army Materiel Command had historically used funds from the unspecified minor military construction account for time critical projects, such as environmental compliance, costing from \$300,000 to \$1.5 million. The GAO explained that, although the projects can also be funded under the military construction appropriation, when funded as unspecified projects they can receive funding during the same year they are identified because they do not receive detailed congressional review and approval. The GAO noted that, according to Army officials, in recent years the Command had not received enough of those funds to meet requirements--resulting in project delays. The GAO found that, overall, the Air Force requested \$36.3 million for 40 specific projects costing \$1.5 million or less--which was 15.4 percent of its total FY 1993 military construction appropriation request for environmental compliance. On the other hand, the GAO found the Army and Navy (combined) requested only \$4.4 million for four such projects--3 percent of their total requests. (p. 3, pp. 10-14/GAO Draft Report)

DDO RESPONSE: Partially concur. The location and type of facilities frequently impacts how the Components fund projects. Where many underground storage tanks are co-located in a fuel farm or around an airfield, it may be more appropriate to address the entire petroleum-oil-lubricant storage and delivery problem at one time, and the magnitude of the project would almost always put it in the military construction appropriation. Addressing problems at different sites could logically be done with smaller projects, under either the military construction or operation and maintenance appropriation, depending on the cost and timing of the projects.

The GAO incorrectly implies that unspecified minor construction between \$300,000 and \$1.5 million is not a military construction appropriation and does not receive Congressional review. Unspecified minor construction is a subaccount of the military construction appropriation. However, unlike major construction projects, the DD Form 1391 includes a lump sum amount for unspecified minor construction projects and does not provide individual project details. Once appropriated, projects costing under \$500,000 can be carried out by the

Service without additional review; however, those costing more than \$500,000 require a 21-day congressional notification and review before they can be accomplished.

The Air Force funded about 40 percent of its environmental compliance requirements in FY 1993 through military construction. That portion, however, is expected to decrease to less than 30 percent in subsequent years.

It should also be recognized that many environmental requirements are not appropriate for the military construction appropriation. The requirements are not one-time projects intended to produce a complete and usable facility or improvement to an existing facility. Large parts of operation and maintenance appropriations fund salaries, supplies, studies, services, maintenance, minor repair, and other recurring costs of environmental compliance.

FINDING G: Funding Differences Reduce DoD and Congressional Oversight. The GAO explained that the appropriations process generally provides limited visibility of projects to the DoD and the Congress during the budgeting process, but usually only the military construction budget process includes detailed project descriptions and justifications for congressional review. In addition, the GAO pointed out that the DoD and the Congress have less control over projects in the operations and maintenance appropriation because, while the Services review the projects during the budgeting process, installations have greater latitude in funding individual operations and maintenance projects included in the budget or for reprogramming the funds to other needs. The GAO concluded that a larger percentage of Air Force environmental compliance spending is subject to greater scrutiny, since more of its environmental requirements are funded from military construction than the other Services.

The GAO acknowledged that the DoD had created an Environmental Budgeting Task Force to develop consistent methods for planning, programming, and budgeting environmental funds-- partly due to the multitude of Service accounts available for environmental funding and the difficulty that presents in measuring progress. The GAO concluded that measuring progress and program results is essential for making funding trade-offs. The GAO also concluded that measuring progress requires consistent reporting of investment costs and results. The GAO stated that the Chairman of the Environmental Budgeting Task Force said the DoD cannot determine investment costs because the Services do not consistently budget and report those costs. Overall, the GAO concluded that a more consistent process in the way the Services identify, classify, and fund environmental compliance projects would help ensure that

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Now on pp. 2 and 12-18.

compliance costs and needs are properly identified and prioritized so that the DoD and the Congress have appropriate oversight for making trade-offs in funding decisions and to help prevent funding inequities. (p. 3, pp. 14-19/GAO Draft Report)

DOD RESPONSE: Partially concur. The DoD environmental requirements are integrated into the appropriations process in accord with applicable law and guidance. The process provides appropriate levels of visibility for major construction, unspecified minor construction, smaller projects, and recurring costs.

Operation and maintenance funded repair and minor construction projects are not approved by the Services prior to submission of their operation and maintenance budgets. Operation and maintenance funds for such projects are appropriated each fiscal year as a "lump sum" to meet requirements identified and approved during the fiscal year so that the most critical work is accomplished with available funds.

The efforts of the Environmental Budgeting Task Force will continue as the recommendations of the Environmental Security Review are implemented. One initiative is to clearly identify and track measures of merit for environmental compliance. That initiative began during the May 1993 Compliance Program Reviews and will continue during FY 1994.

In July 1993, the Office of Secretary of Defense directed the Components to identify funding required in Cleanup, Compliance, Conservation, Pollution Prevention, and Technology. Budget exhibits have been revised to reflect that structure for the FY 1995 Budget. The DoD is moving to standardize environmental budgeting and accounting. The Department's environmental programs are intended to be cost-effective and results-oriented, regardless of funding sources.

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RECOMMENDATION

Now on p. 17.

RECOMMENDATION: The GAO recommended that the Secretary of Defense develop guidance to assist the Military Services in consistently classifying projects as environmental or to meet a mission or other requirement--including specifying how the Services will report costs related to meeting environmental requirements for projects classified as other than environmental and from which appropriations the projects should be funded. (p. 19/GAO Draft Report)

DOD RESPONSE: Partially concur. Numerous documents already

provide guidance on consistently classifying projects as environmental or to meet mission or other requirements. Some examples include the following:

- Title 10, U.S. Code.
- Executive Order 12088, "Federal Compliance with Pollution Control Standards."
- Office of Management and Budget Circular A-106, "Reporting Requirements in Connection with the Prevention, Control and Abatement of Environmental Pollution at Existing Federal Facilities."
- Title 40, Code of Federal Regulations--Protection of the Environment.
- Secretary of Defense Memorandum on "Environmental Management Policy," issued October 1989.
- DoD Directive 5100.50, "Protection and Enhancement of Environmental Quality."
- DoD Publication "Federal Agency Pollution Abatement Plan (OMB A-106), A Handbook for Understanding the OMB A-106 Process."

In addition, in July 1993, the Office of the Secretary of Defense directed the Components to identify funding required in cleanup, compliance, conservation, pollution prevention, and technology. Budget exhibits have been revised to reflect that structure for the FY 1995 Budget. The DoD is moving to standardize environmental budgeting and accounting.

As discussed in the DoD response to Finding D, the DoD is also developing a new environmental security strategy focused on cleanup, compliance, conservation, pollution prevention, and technology. As the strategy is implemented, beginning in FY 1993, the DoD will consider any additional guidance that may be indicated to ensure the best way to achieve strategy objectives.

Requirements are classified as environmental in the Office of Management and Budget A-106 reporting process, and military construction projects are classified by category in the budget process. Project documentation indicates to what extent they are driven by environmental laws and programs. Projects that don't produce a complete and usable facility or a complete and usable improvement to an existing facility and recurring maintenance projects are not appropriate for the military construction appropriation.

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